

Regional Municipality of York

CIF Project # 420

York Mixed Plastics P&E Campaign

Final Report

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Mixed Plastics Report

Overview

Background

The Regional Municipality of York covers 1,776 square kilometres from Lake Simcoe in the north, to Steeles Avenue in the south. York Region is bordered by Simcoe County and Peel Region in the west, Durham Region in the East and the City of Toronto in the south. With a population of over one million residents, York Region has 280,000 single family households and approximately 38,000 multi-residential apartments. York Region is composed of nine local municipalities that include the Towns of Aurora, East Gwillimbury, Georgina, Newmarket, Richmond Hill, Whitchurch-Stouffville, the Cities of Markham and Vaughan, and the Township of King.

Solid waste is managed through a two-tiered system in York Region. The nine local municipalities provide curbside waste collection services while the Region is responsible for the processing and disposal of the waste. In 2011, the Blue Box material that York Region processed was over 76,000 tonnes and the revenue generated from the sales of Blue Box recyclables was over \$11 million.

Project Purpose

According to local municipal curbside waste audits that were conducted in 2010, approximately one per cent (by weight) of the residual waste stream is composed of recyclable mixed plastics (#3 to 7). By moving these mixed plastics from the residual waste stream to the Blue Box it could lead to increased diversion and reduced costs.

Mixed plastics were introduced to the Blue Box program on June 24, 2004. Since the introduction of mixed plastics in the Blue Box program, there has been a low capture rate as compared to other plastics (PET and HDPE). The lower capture of mixed plastics is likely caused by a combined factor of public confusion over the blue box acceptable items and packaging changes in the market (decreasing weight but increasing volume).

A promotion and education (P&E) campaign was developed for mixed plastics to increase the effectiveness of the blue box program by providing additional capture of acceptable materials. The P&E campaign was intended to increase public awareness on common mixed plastic materials that are currently being misplaced in the residual waste stream. The P&E campaign was also expected to help to reduce confusion amongst residents that are confused on whether items such as bakery and produce clamshells, and margarine tubs and lids are permitted in York Region's Blue Box program.

Project Goals

1. Raise awareness and educate residents on York Region's Blue Box Program, specifically which materials are accepted in the Blue Box
2. Reduce tonnage of mixed plastics discarded in the residual waste stream and to increase capture rate of mixed plastics in the Blue Box program by 20%, compared to the previous years
3. Increase diversion through the Blue Box Program
4. Increase the effectiveness and efficiency of the Blue Box Program by providing additional capture of materials which will make additional materials available for market

Implementation

Promotional Campaign

A promotional campaign ran from January 29, 2012 to April 5, 2012. The messaging used for this campaign stressed and highlighted that fact that rigid, plastic food and household containers are accepted in the Blue Box Program to all York Region residents. When delivering this message throughout the campaign there was a focus on educating residents that clamshells, take out containers and shampoo bottles should be placed in the Blue Box. This campaign provided additional education on mixed plastics to increase awareness and further educate the public. The promotional campaign consisted of the following strategies:

Print advertising

Full colour 3/8 page ads in nine of the Region's local papers

Total of five insertions over a period of seven weeks (i.e. two weeks on, one week off)

Full colour ½ page ad in York Region Zoned Toronto Star for two insertions

Brochure / Newsletters / Waste Calendars

Increase content in brochure, newsletters and waste calendars to include more detail on mixed plastics

Website

Increase content on website with images to provide more detail on mixed plastics

Radio advertising

Broadcast 30 sec information commercial on mixed plastics in the Blue Box

15 spots per week over five weeks

Public Outreach

Attendance at public events distributing and communicating messages on mixed plastics

Materials Developed

The promotional material used for the campaign can be found in Appendix A.

Distribution

The distribution of ad material can be found in Appendix B

Conclusion

Monitoring and Tracking; Analysis

Waste audit data gathered by York Region for other projects was used to monitor the effects of the campaign. Baseline data for this campaign was gathered from single family waste audits on Blue Box and Residual waste material streams. The baseline audit was conducted in October 2011, prior to the launch of the Mixed Plastic Campaign. Baseline data indicated that mixed plastics accounted for 15.2% of plastics in the blue box stream.

Blue Box contamination audits, performed in May 2012, were used as a metric to monitor and assess the effectiveness of the Mixed Plastics Campaign. Sampling and sorting methodology was deemed to be comparable to single family audits for the Blue Box stream. Post-campaign data found that mixed plastics represented 17.3% of plastics in the Blue Box stream. Results indicate that mixed plastics increased by 14% as a result of the mixed plastics promotional campaign.

Mixed Plastics		
Pre-Campaign Single Family Audit - October 2011 15.2%	Post-Campaign Blue Box Contamination Audit – May 2012 17.30%	Percent Increase 14.0%

Program Results

The amount of mixed plastics captured in the Blue Box program increased as a result of the P&E campaign. Audit results indicate that the levels of mixed plastics increased after the campaign as compared to baseline data. Although the goal of increasing the capture rate of mixed plastics by 20% was not met, the capture rate was increased by 14%. Seasonal variation needs to be considered when reviewing these numbers. However, since the audits were performed in the spring and fall results should be comparable. The P&E campaign significantly increased capture rates of mixed plastics and as a result the project should be deemed a success. Increased capture of mixed plastics increases diversion by removing it from the residual stream making the Blue Box program more effective and efficient as more materials are available for market. This will lead to overall system cost reductions as the fully burdened cost for processing of blue box material is \$64 per tonne, net of marketing revenue, compared to a fully burdened processing cost of \$107 per tonne for garbage.

Recommendations

P&E is a vital component to the success of our Blue Box program. Continual promotion and education is required to maintain and increase capture of mixed plastics and other acceptable blue box items.

Material developed in the campaign was developed with the intention that materials can be shared with other municipalities across the province. The material produced here can be used as a resource for other municipalities whom wish to employ a similar P&E campaign. If they experience the same success as York Region this could lead to a 14% increase in mixed plastics capture for these municipalities increasing province-wide mixed plastics capture rates.

Appendix A – Promotional Material – Ad Campaign

RIGID PLASTIC

CONTAINER

RECYCLABLE



Rigid plastic food and household containers
are accepted in York Region's Blue Box program.

Don't know where it goes? Use The Bin-dicator tool
at www.york.ca/waste



For more information, please visit
www.york.ca/waste or call 1-877-449-9675 ext. 3000



- ✓ RIGID PLASTIC
- ✓ CONTAINER
- ✓ RECYCLABLE



Rigid plastic food and household containers **are accepted** in York Region's Blue Box program.

Don't know where it goes? Use The Bin-dicator tool at www.york.ca/waste



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RECYCLE YOUR PLASTIC.



Rigid plastic food and household containers **are accepted** in York Region's Blue Box program.

Don't know where it goes?
Use The Bin-dicator tool at
www.york.ca/waste



For more information, please visit
www.york.ca/waste or call 1-877-449-9675 ext. 3000



Appendix B – Promotional Material – Distribution Chart

Print Ad Distribution Schedule

Publication	Date of Publication	Take-out Container	Produce Container	Shampoo Bottle	All Three Types	Specifications	Net	Gross
Vaughan Citizen	Sunday, Jan. 29	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$747.25	\$844.39
	Thursday, Feb. 2						\$747.25	\$844.39
	Thursday, Feb. 23						\$747.25	\$844.39
	Thursday, Mar. 8						\$747.25	\$844.39
	Thursday, Mar. 22						\$747.25	\$844.39
Era Banner	Sunday, Jan. 29	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$1,192.62	\$1,347.69
	Thursday, Feb. 2						\$1,192.65	\$1,347.69
	Thursday, Feb. 23						\$1,192.65	\$1,347.69
	Thursday, Mar. 8						\$1,192.65	\$1,347.69
	Thursday, Mar. 22						\$1,192.65	\$1,347.69
	Thursday, Apr. 5						\$1,192.65	\$1,347.69
R. Hill Liberal	Thursday, Feb. 2	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$766.90	\$866.60
	Thursday, Feb. 9						\$766.90	\$866.60
	Thursday, Mar. 8						\$766.90	\$866.60
	Thursday, Mar. 22						\$766.90	\$866.60
	Thursday, Apr. 5						\$766.90	\$866.60
Thornhill Liberal	Thursday, Feb. 2	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$550.75	\$622.35
	Thursday, Feb. 23						\$550.75	\$622.35
	Thursday, Mar. 1						\$550.75	\$622.35
	Thursday, Mar. 8						\$550.75	\$622.35
	Thursday, Mar. 22						\$550.75	\$622.35
Markham Economist	Saturday, Feb. 4	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$917.55	\$1,036.83
	Saturday, Feb. 11						\$917.55	\$1,036.83
	Saturday, Feb. 25						\$917.55	\$1,036.83
	Saturday, Mar. 10						\$917.55	\$1,036.83
	Saturday, Mar. 24						\$917.55	\$1,036.83
Stouffville Sun	Saturday, Feb. 4	X	X	X	X	full colour, 3/8 page: 5.145" w x 9.375" h	\$400.10	\$452.11
	Saturday, Feb. 11						\$400.10	\$452.11
	Saturday, Feb. 25						\$400.10	\$452.11
	Saturday, Mar. 10						\$400.10	\$452.11
	Saturday, Mar. 24						\$400.10	\$452.11
Georgina Advocate	Thursday, Feb. 23			X		full colour, 3/8 page: 5.145" w x 9.375" h	\$491.80	\$555.73
	Thursday, Mar. 22				X	full colour, 3/8 page: 5.145" w x 9.375" h	\$491.80	\$555.73
Vaughan Weekly	Wednesday, Feb. 8	X			X	full colour, page dominant: 6 3/4" x 9 3/4"	\$895.00	\$1,011.35
	Wednesday, Feb. 22						\$895.00	\$1,011.35
	Wednesday, Feb. 29						\$895.00	\$1,011.35
	Wednesday, Mar. 7						\$895.00	\$1,011.35
	Wednesday, Mar. 21						\$895.00	\$1,011.35

King Weekly	Wednesday, Feb. 8	X				full colour, page dominant: 6 3/4" x 9 3/4"	\$775.00	\$875.75
	Wednesday, Feb. 22	X					\$775.00	\$875.75
	Wednesday, Feb. 29				X		\$775.00	\$875.75
	Wednesday, Mar. 7				X		\$775.00	\$875.75
	Wednesday, Mar. 21				X		\$775.00	\$875.75
Toronto Star	Thursday, Feb. 16				X	full colour, 1/4 page: 5 3/16" x 10 5/16"	\$995.55	\$1,124.97
	Thursday, Mar. 1				X		\$995.55	\$1,124.97

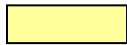
Radio Ads

Jewel 88.5 - 62 spots rotated between March - July 2012 @ \$30.00 a spot

Outreach Schedule

Cost: \$0

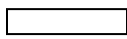
Date	What	Where	Municipality	Audience	Note
Jan. 30, 2012	Employee Presentation	York Region	Newmarket / All	New Employees	Welcome Aboard PPT & MRF Video
Feb. 27, 2012	Employee Presentation	York Region	Newmarket / All	New Employees	Welcome Aboard PPT & MRF Video
Mar. 26, 2012	Employee Presentation	York Region	Newmarket / All	New Employees	Welcome Aboard PPT & MRF Video
Mar. 27, 2012	School Presentation	Huron Heights SS	Newmarket	Grade 11 (20)	Presentation / MRF Tour
Mar. 30 – Apr. 1, 2012	Newmarket Home Show	Magna Centre, Newmarket	Newmarket / All	Home Owners	Display
Apr. 3, 2012	School Presentation	King City SS	King	Grade 11 (40)	Presentation / MRF Tour
Apr. 4, 2012	Presentation	King City Brownies	King	Gr. 1-3 (20)	Presentation, video @ MRF



Youth Presentations



Events



Adult Presentations

PPT = Powerpoint presentation

Appendix C - Financials

Financials

	Estimated Cost	Actual Cost
Print Ads (3/8 pg. for 5 wks x 9 local papers)	\$38,000.00	\$38,000.00
Print Ad (1/2 pg. for 2 wks x Toronto Star)	\$3,600.00	\$2,300.00
Mobile Signs (10 x 4 wks)	\$3,000.00	
Website update	\$0.00	\$0.00
Public Outreach	\$0.00	\$0.00
Media Release	\$0.00	
Newsletter article	\$0.00	
Email blast (Toronto Star subscribers – Geo-target York Region)	\$3,400.00	
Radio ad (Jewel 88.5FM)	\$2,500.00	\$2,100.00
Still to Come		
Brochure (5% content)	\$1,000.00	\$2,000.00
Local Municipal Waste Calendars (5% content)	\$500.00	\$1,000.00
TOTAL	\$52,000.00	\$45,400.00